

3rd Annual Online Certificate Course in Flow Cytometry

Principles, Experimental Designing & Data Analysis

25th April – 25th May, 2025 (7.00 pm - 9.00 pm IST)

Course Overview & Objective

Flow Cytometry is one of the most powerful single cell analysis tool used in biological research and clinical diagnostics. Using this state-of-the art technology, we can study and quantify various parameters of the cells or cell like particles in heterogeneous samples. This 1-month online course will cover the fundamentals and provide a deeper understanding of the important concepts of flow cytometry. Through lectures and practical activities, participants will learn the core concepts in experimental designing, data acquisition, data analysis & presentation and troubleshooting. We will cover the theory combining with the practical sessions of the most frequent assays as part of our course curriculum. This in-depth 1-month course will enhance your flow cytometry knowledge and skills preparing you for any current or future flow cytometry jobs and projects.

Course Highlights

- Basics of Flow Cytometry
- Applications of Flow Cytometry
- Know Your Cytometer (KYC)
- Machine Setup, QC, Voltage/Gain Settings etc
- Sample Preparation, Experimental Designing, Controls
- Panel Designing, Spectral Overlap & Compensation
- Cell Sorting
- Advances in Flow Cytometry (Spectral)
- Data Analysis and Presentation (Basic & High Dimensional)
- Live Demonstration of Instrument Setup & Data Acquisition
- Q & A, Troubleshooting, Self Assessment

BONUS LECTURE:

Career Options in Flow Cytometry

Speakers



Dr. Hemant Agrawal
Director
Flowcytometry Solutions,
India



Prof. Rashmi Kaul
Professor of Immunology
Dept. Biochem. & Microbiol
OSU-CHS, USA



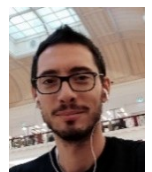
Dr. Rui Gardner
Head, Flow Cytometry,
MSKCC, NY,
USA



Dr. Alfonso Blanco
Director, Flow Cytometry,
University College Dublin,
Ireland



Dr. Paul Hutchinson
Incharge
Flow Cytometry Facility
NUS, Singapore



Dr. Andrea Valle
Product Manager,
De Novo Software,
USA

Who Can Attend

- Student, Lab Technologist, Researcher, Postdoc, Faculty, Doctor, Industry Professional, etc
- This online course is designed for students, researchers, doctors and technical people at any step of their career and will cover the important concepts and principles of flow cytometry.
- Participants from academic/non-academic institutions from all over the world are encouraged to apply

Program (7.00 pm - 9:00 pm IST/ 8.30 am – 10.30 am CST)

Day and Date	Topic
Day 1 (25 th April 2025, Friday)	Introduction to Flow Cytometry
Day 2 (26 th April 2025, Saturday)	-Applications of Flow Cytometry in Biological Sciences -The Impact of Flow Cytometry on Immunobiology
Day 3 (28 th April 2025, Monday)	KYC: Know Your Cytometer —Decoding the Black Box--Fluidics, Optics & Electronics Setting up a Flow Cytometer Correctly —Quality Control, Template Creation, PMTV Settings, Threshold Settings etc. (LIVE Demonstration)
Day 4 (30 th April 2025, Wednesday)	Q & A, Troubleshooting, Discussion
Day 5 (2 nd May 2025, Friday)	Flow Cytometry Experimental Designing (Part 1) (Fundamentals) Fluorochrome/Dye Selection, Spectral Viewer, Spectral Overlap & Compensation, Sample and its Quality, Antigen Density, Autofluorescence etc.
Day 6 (5 th May 2025, Monday)	Flow Cytometry Experimental Designing (Part 2) (Cell Health assays) like Viability, Apoptosis, ROS, MMP, Proliferation etc
Day 7 (7 th May 2025, Wednesday)	Flow Cytometry Experimental Designing (Part 3) (Immunophenotyping) Antibodies Selection, Antibody Clone, Panel designing, Data Spread, Spillover Spreading Matrix (SSM) etc.
Day 8 (9 th May 2025, Friday)	- Sample Preparation for Flow Cytometry Assays - Controls in Flow Cytometry Assay Controls, Gating Controls, Instrument Controls, Comp Controls etc
Day 9 (11 th May 2025, Sunday)	Career Options in Flow Cytometry
Day 10 (13 th May 2025, Tuesday)	LIVE Demonstration: Multicolour Immunophenotyping Experiment Antibodies Titration, Preparation of Compensation Controls and Multicolor Samples, Generation of Compensation Matrix and Spillover Spreading Matrix (SSM), Data acquisition and Discussion
Day 11 (15 th May 2025, Thursday)	- Advances in Flow Cytometry (Spectral Flow Cytometry) Q & A, Troubleshooting, Discussion
Day 12 (16 th May 2025, Friday)	Flow Cytometry Data Analysis and Presentation Data Standards, Plots, Displays, Axis, Gating, Statistics, No. of Events to Acquire etc
Day 13 (18 th May 2025, Sunday)	Flow Cytometry Data Analysis and Presentation (Live Demonstration) Analysis of Different Data Sets—Cell Viability, Cell Cycle, Apoptosis, Proliferation, MMP, ROS, Signal Transduction, Cytokines, Whole Blood Leukocytes etc.
Day 14 (20 th May 2025, Tuesday)	Lecture: Cell Sorting—Principle and Approach Live Demonstration: Cell Sorting
Day 15 (22 nd May 2025, Thursday)	Flow Cytometry Data Analysis and Presentation (Live Demonstration) High Dimensional Data Analysis (tSNE, UMAP etc)
Day 16 (25 th May 2025, Sunday)	MIFlowCyt: Flow Cytometry Data Publication Guidelines (An ISAC Recommendation) Troubleshooting, Discussion, Q & A and Final Quiz

This is an interactive course designed to learn the flow cytometry principles in a simple way

This is not a clinical diagnosis course

Exercises will be given for each topic for self assessment

How to Apply

- Fill Registration form online by clicking on the “Register Now” button below.
- Thereafter make a payment either via scanning the below QR using any payment app (From India) or send an email at training@flowsols.com requesting the payment link (Outside India).
- Once paid, share the payment receipt at training@flowsols.com, your registration will be confirmed within 24 hours via email.

Registration Fee*

Country Registration Category	Registration Fee*		
	INDIA	SAARC/South East Asia/Africa/South America	USA/Canada/Europe/ Middle East/Australia/New Zealand/China/Japan/Korea
Student/Research Fellow (non-PhD)/Trainee/Technologist	INR 6000	USD 150	USD 300
Postdoc/Resident Doctor (JR/SR)/ Technical or Scientific Officer/ Core Manager	INR 8000	USD 200	USD 400
Faculty/ Medical Consultant	INR 10000	USD 250	USD 500
Industry Professional	INR 15000	USD 375	USD 750

Discount on Registration Fee
10% for Group of 10 or More

***Registration Fee is non-refundable**

Register Now

Payment (For India)

Scan the below QR Code and make a payment



International Payment

After filling the registration form, send an email at training@flowsols.com requesting a payment link



Reading material provided



Recordings available for all sessions



E-Certificate given to registered participants



Online course is 32 hours over 16 days

Feedback from Last Courses

“There are very few course instructors like you who put in their sweat to ensure we maximize our learnings from the course. I really appreciate how you executed the course and always kept engaging the students and answering all the queries. Thank you for the course and it was such a great experience!”

IISc, Bangalore, India

“Thank you very much for your brilliant teaching and dedication sir, learnt a lot and appreciate it very much”

University of Sri Jayewardenepura, Sri Lanka

“I very much enjoyed the course, it was very well organized and you are a very patient and considerate teacher. I will definitely recommend this course to my colleagues and anyone else interested in flow cytometry”

Cornell University, USA

“Thank you very much. I wanted to express my sincere gratitude for the beautiful lectures and informative workshop on flow cytometry. Your expertise & passion for the subject matter were evident in every aspect of the presentation, and I left feeling inspired and empowered.”

NCI Cairo University, Egypt

“Thank you very much, Sir. This was my first formal course on flow learning, and I must admit, I started from scratch. However, your ability to explain this complex topic in such a simple and beautiful manner has truly made a significant impact on my understanding. I can confidently say that I am no longer at ground zero, thanks to your guidance.”

Dhaka Medical College, Bangladesh

Our Supporter



Last Date of Registration 23rd April 2025

Contact: training@flowsols.com, +91-7665130114